CLAIMS

What is claimed is:

1. A surgical cutting tool comprising a housing having a bore and at least one slot formed through its wall, a cutting blade extending through the slot, and an actuator disposed in the bore and in engagement with the blade so that axial movement of the actuator in the bore causes radial movement of the blade relative to the slot.

2. The surgical cutting tool of claim 1 wherein at least one surface on the actuator engages a corresponding surface on the blade to cause the radial movement in response to the axial movement.

3. The surgical cutting tool of claim 2 wherein one of the surfaces is a tapered surface.

4. The surgical cutting tool of claim 2 wherein the surface on the actuator is a conical surface and the surface on the blade is a tapered surface.

5. The surgical cutting tool of claim 2 wherein there are a plurality of angularly spaced slots formed through the housing and a corresponding number of blades respectively mounted in the slots.

6. The surgical cutting tool of claim 5 wherein one surface on the actuator engages a corresponding surface on all of the blades.

7. The surgical cutting tool of claim 1 wherein a plurality of axially-spaced surfaces are formed on the actuator and a plurality of axially-spaced surfaces are formed on the blade,

each surface on the actuator engaging a corresponding surface formed on the blade to cause the radial movement in response to the axial movement.

8. The surgical cutting tool of claim 1 wherein there are a plurality of angularly spaced slots formed through the housing and a corresponding number of blades respectively mounted in the slots.

9. The surgical cutting tool of claim 8 wherein there are a plurality of axially-spaced surfaces formed on the actuator and a plurality of axially-spaced surfaces formed on the blade, each surface on the actuator engaging the corresponding surfaces on the blades to cause the radial movement in response to the axial movement.

10. The surgical cutting tool of claim 1 further comprising a biasing member for biasing the blade radially inwardly relative to the housing.

11. The surgical cutting tool of claim 10 wherein the biasing member is a garter spring.

12. The surgical cutting tool of claim 1 further comprising an adjustment member engaging the actuator and adapted to be manually actuated for causing the axial movement of the actuator.

13. The surgical cutting tool of claim 12 where in the adjustment member is a bolt in threaded engagement with the actuator.

14. The surgical cutting tool of claim 1 wherein the radial movement of the blade changes the amount of cutting by the tool.

15. The surgical cutting tool of claim 14 wherein there are a plurality of angularly spaced slots formed through the housing and a corresponding number of blades respectively mounted in the slots so that the cutting pattern is circular.

16. A method of using a surgical cutting instrument, comprising extending at least one cutting blade through a slot formed in a tubular housing, and moving an actuator member axially in the housing so that engaging surfaces on the blade and the member causes corresponding radial movement of the blade relative to the slot to adjust the amount of cutting.

17. The method of claim 16 further comprising forming at least one surface on the actuator that engages a corresponding surface on the blade to cause the radial movement in response to the axial movement.

18. The method of claim 17 wherein there are a plurality of angularly spaced slots formed through the housing and a corresponding number of blades respectively mounted in the slots.

19. The method of claim 18 further comprising engaging all of the surfaces of the blades by the surface of the actuator.

20. The method of claim 16 further comprising forming a plurality of axially-spaced surfaces on the actuator and forming a plurality of axially-spaced surfaces on the blade, each surface on the actuator engaging a corresponding surface

formed on the blade to cause the radial movement in response to the axial movement.

21. The method of claim 16 wherein there are a plurality of angularly spaced slots formed through the housing and a corresponding number of blades respectively mounted in the slots.

22. The method of claim 21 further comprising forming a plurality of axially-spaced surfaces on the actuator and forming a plurality of axially-spaced surfaces on the blade, each surface on the actuator engaging the corresponding surfaces on the blades to cause the radial movement in response to the axial movement.

23. The method of claim 16 further comprising biasing the blade radially inwardly relative to the housing.

24. The method of claim 16 further comprising manually actuating an adjustment member on the housing for moving the actuator.

25. The method of claim 16 wherein there are a plurality of angularly spaced slots formed through the housing and a corresponding number of blades respectively mounted in the slots so that the cutting pattern is circular.

26. A surgical cutting tool comprising a housing having a bore and at least one slot formed through its wall, a cutting blade extending through the slot, and means for moving the blade radially relative to the slot to change the amount of cutting.

27. The surgical cutting tool of claim 26 wherein the means is disposed in the bore in engagement with the blade so that axial movement of the means in the bore causes radial movement of the blade relative to the slot.

28. The surgical cutting tool of claim 26 wherein at least one surface on the means engages a corresponding surface on the blade to cause the radial movement.

29. The surgical cutting tool of claim 28 wherein the surface on the means is a conical surface and the surface on the blade is a tapered surface.

30. The surgical cutting tool of claim 26 wherein there are a plurality of angularly spaced slots formed through the housing and a corresponding number of blades respectively mounted in the slots.

31. The surgical cutting tool of claim 30 wherein one surface on the means engages a corresponding surface on all of the blades.